FED. ROAD REG. NO.	STATE	PROJECT NO.	SHEET NO.
4	MISS.	BR–2910–00(002)	1

GENERAL INDEX

INCLUDED THIS PROJECT		BEGIN WITH SHEET
☒	ROADWAY	1
☐	PERMANENT SIGNS	1001
☐	TRAFFIC SIGNALS	2001
☐	ITS COMPONENTS	3001
☐	LIGHTING	4001
☐	(RESERVED)	5001
☒	ROADWAY STANDARD DWGS	6001
☐	BRIDGE STANDARD DWGS	7001
☒	BRIDGE	8001
☒	CROSS SECTIONS	9001

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

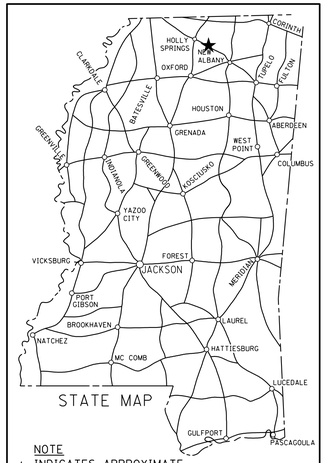
PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FEDERAL AID PROJECT NO. BR–2910–00(002)

SR 178 OVER CHEWALLA CREEK
AND TIPPAH RIVER AND RELIEF
MARSHALL COUNTY

103162–301000

SCALES

PLAN		1 IN. = 100 FT.
PROFILE	HOR.	1 IN. = 100 FT.
	VERT.	1 IN. = 10 FT.
LAYOUT		1 IN. = 3000 FT.



NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 89° 19′ 07″ W LONG. 34° 40′ 05 N
(APPROX. MIDDLE OF PROJECT)

BRIDGE STRUCTURES REQ'D.

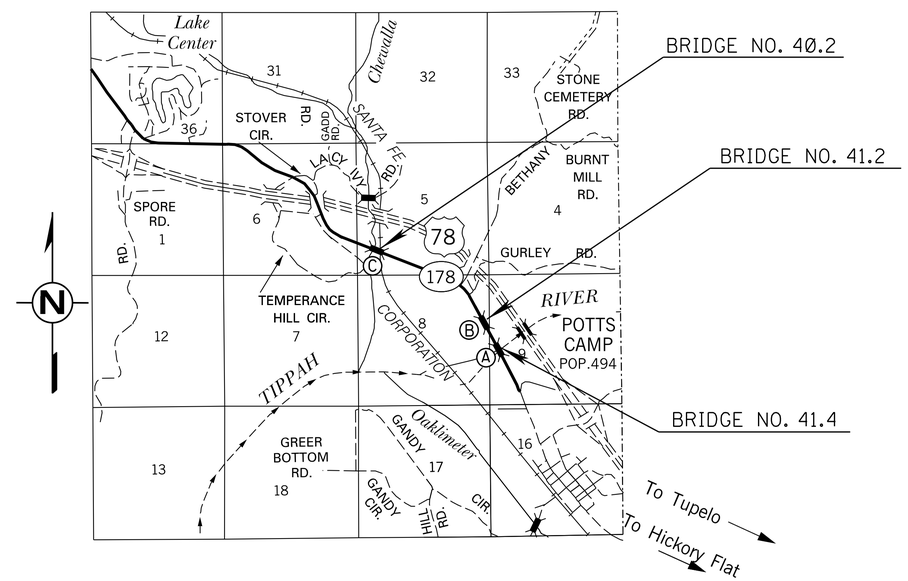
Ⓐ SR178 OVER TIPPAH RIVER
BR. NO. 41.4
STA. 86+38.88 – STA. 100+15.13
SPANS = 5@80', 3@138' 7@80'
LENGTH = 1376.25'

Ⓑ SR178 OVER TIPPAH RIVER RELIEF
BR. NO. 41.2
STA. 109+78.88 – STA. 112+21.13
SPANS = 3@80'
LENGTH = 242.25'

Ⓒ SR178 OVER CHEWALLA CREEK AND BNRR
BR. NO. 40.2
STA. 157+82.88 – STA. 166+79.13
SPANS = 1@80', 3@138', 5@80'
LENGTH = 896.25'

BOX BRIDGES REQ'D.

N/A



DESIGN CONTROL
55 MPH = V (SPEED DESIGN)
ADT (2020) = 1800 : ADT (2040) = 2200
DHV = 260 : D = 60 % T = 7 %

PERMITS ACQUIRED BY MDOT		
WETLANDS AND WATERS PERMITS (NECESSARY FOR ULTIMATE IMPROVEMENTS ONLY):	WATERS	WETLANDS
NATIONWIDE #14	N	N
NATIONWIDE (OTHER)*	Y	Y
GENERAL*	N	N
INDIVIDUAL (404)*	N	N

* ACQUISITION OF PERMITS FOR TEMPORARY IMPACTS DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR

STORMWATER PERMIT	Y
Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES)
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: JCT DATE: 11/6/12

GPS CONTROL NOTES

HORIZONTAL DATUM: NAD 83 (2007) MS EAST (2301) (US SURVEY FEET)

HORIZONTAL MONUMENT	NORTH	EAST
HAMILTON	1857458.28	789289.74
McGILL	1900495.79	929763.61
X39	1863758.95	861556.43

VERTICAL DATUM: NAVD 88 (US SURVEY FEET)

VERTICAL MONUMENT	ELEVATION
78V89	325.81
78V90	334.66

ALL AZIMUTHS AND DISTANCES ARE GRID VALUES, US SURVEY FEET

CONVERSION VALUES	PROJECT AVERAGE
GROUND TO GRID (COMBINED) FACTOR	0.99996126
GRID TO GEODETIC AZIMUTH	(-)00°16′47.696″

EQUATIONS

STA 104+94.33 BK = STA 105+00.00 AH (+5.67)

STA 175+03.12 BK = STA 175+06.06 AH (–2.94)

EXCEPTIONS

N/A

LENGTH DATA

LENGTH OF ROADWAY	4485.25	FT.	0.849	MI.
LENGTH OF BRIDGES	2514.75	FT.	0.476	MI.
LENGTH OF PROJECT (NET)	7000.00	FT.	1.325	MI.
LENGTH OF EXCEPTIONS			0	MI.
LENGTH OF PROJECT (GROSS)	7000.00	FT.	1.325	MI.

JOSEPH BRIAN JOHNSON LICENSED PROFESSIONAL ENGINEER PE 18727 STATE OF MISSISSIPPI
DATE: 11/7/12

BRADLEY HOWARD FLETCHER LICENSED PROFESSIONAL ENGINEER 14218 STATE OF MISSISSIPPI
DATE: 11/7/12

REVISIONS	BY	DATE

APPROVED:

CHIEF ENGINEER DATE

EXECUTIVE DIRECTOR DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

APPROVED:

DIVISION ADMINISTRATOR DATE

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

TITLE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

11/7/2012 15:02:59 TITLE178.DGN

STATE	PROJECT NO.
MISS.	BR-2910-00(002)

DESCRIPTION OF SHEET	WKG. NO.	SH. NO.
TITLE SHEET (1)		1
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GENERAL NOTES	GN-1	3
TYPICAL SECTION SHEETS (2)		
TYPICAL SECTION - WIDENING AND OVERLAY	TS-1	4
TYPICAL SECTION - NEW CONSTRUCTION	TS-2	5
QUANTITY SHEETS (5)		
SUMMARY OF QUANTITIES	SQ-1	6
SUMMARY OF QUANTITIES	SQ-2	7
ESTIMATED QUANTITIES	EQ-1	8
ESTIMATED QUANTITIES	EQ-2	9
ESTIMATED QUANTITIES	EQ-3	10
PLAN & PROFILE SHEETS (3)		
SR178 OVER TIPPAH RIVER	3	11
SR178 OVER TIPPAH RIVER RELIEF	4	12
SR178 OVER CHEWALLA	5	13
SPECIAL DESIGN SHEETS (40)		
EROSION CONTROL PLAN	ECP-3	14
EROSION CONTROL PLAN	ECP-4	15
EROSION CONTROL PLAN	ECP-5	16
TYPICAL TEMPOTARY EROSION/ SEDIMENT CONTROL APPLICATIONS	ECD-1	17
DETAILS OF SEDIMENT BARRIER APPLICATIONS	ECD-2	18
DETAILS OF SILT FENCE INSTALLATION	ECD-3	19
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	ECD-4	20
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES, SILT FENCE AND HAY BALE DITCH CHECKS	ECD-5	21
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DETAILS OF EROSION CONTROL SILT DIKE DITCH CHECK	ECD-7	23
ROCK DITCH CHECK	ECD-8	24
ROCK DITCH CHECK WITH SUMP EXCAVATION	ECD-9	25
INLET PROTECTION TYPICAL APPLICATIONS AND DETAILS	ECD-10	26
INLET PROTECTION DETAILS FOR COARSE AGGREGATE ON GRADES AND SAGS	ECD-11	27
INLET PROTECTION DETAILS OF WATTLES	ECD-12	28
INLET PROTECTION DETAILS OF MANUFACTURED INLET PROTECTION DEVICE	ECD-13	29
INLET PROTECTION DETAILS OF SAND BAG	ECD-14	30
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TEMPORARY STREAM DIVERSION	ECD-17	33
TEMPORARY STREAM DIVERSION (BOX EXTENSIONS)	ECD-18	34
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TYPICAL TEMPORARY EROSION CONTROL MEASURES (SLOPE DRAIN AND TYPE A SILT BASIN)	TEC-2	37
TYPICAL TEMPORARY EROSION CONTROL MEASURES (TYPE "D" SILT BASINS)	TEC-D	38
BRIDGE END PAVEMENT WITH OVERLAY	BE-1B	39
33.5" BRIDGE END PAVEMENT RAIL	BE-PR-1B	40
GUARDRAIL: BRIDGE END SECTION TYPE "I" (WOOD POSTS)	GR-2F	41
GUARDRAIL: BRIDGE END SECTION TYPE "I" (STEEL POSTS)	GR-2G	42
GUARDRAIL: RUB RAIL HARDWARE SHEET	GR-RR	43
RIGHT-OF-WAY MARKER	RW-1	44
SPECIAL DESIGN PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED HIGHWAYS	SDPM-1	45
LOCATION OF R16-3 SIGNS	DET-6	46
VEGETATION SCHEDULE	VEG-1	47
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DETAIL OF CONSTRUCTION SIGNING	DCS-2	49
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DETAILS OF TYPICAL DITCH TREATMENT	DT-1	51
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DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
STANDARD DRAWINGS (24)			
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED HIGHWAYS	12-01-99	PM-1	6120
EROSION CONTROL		EC-1	6140
GUARDRAIL: "W" BEAN (WOOD POSTS)		GR-1	6180
GUARDRAIL: "W" BEAN (STEEL POSTS)		GR-1B	6182
GUARDRAIL: TYPICAL INSTALLATION AT BRIDGE APPROACHES		GR-4A	6195
GUARDRAIL: MISCELLANIEOUS HARDWARE	03-01-02	GR-HW	6202
MEDIAN BARRIER: CONCRETE (PRECAST)	03-01-02	MB-2A	6205
ROUTE SHIELDS AND "EXIT ONLY" PANELS		SN-2	6221
STANDARD ROADSIDE SIGN		SN-3	6222
STANDARD ROADSIDE SIGN		SN-3A	6223
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION		SN-4	6225
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION		SN-4A	6226
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION		SN-4B	6227
TYPICAL GUARDRAIL DELINEATIONS	03-01-02	SN-8C	6236
TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)		TCP-1	6250
SHORT DURATION CLOSING OF TW0-LANE TWO-WAY HIGHWAYS		TCP-8	6257
TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO-WAY ROADS		TCP-11	6260
TRAFFIC CONTROL PLAN UNEVEN PAVEMENT DETAILS		TCP-14	6263
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS		TCP-15	6264
RURAL DRIVEWAYS		RD-1	6271
TYPICAL GRADING TRANSITION BETWEEN CUTS AND FILLS		GT-1	6272
SPUR DIKE: EARTH	12-01-99	ED-1	6274
MISCELLANIOUS DETAIL SHEET 1. STAKED PIPE JOINTS 2. EXCAVATION AT GRADE POINTS		MDS-1	6290
DETAIL OF PAVED FLUMES		PF-1	6291
BRIDGE (107)			
SEE SHEET 8001 FOR BRIDGE INDEX			8001-8107
CROSS SECTIONS (34)			9001-9034
TOTAL SHEETS (218)			---

Stantec

PS & E PLANS-DATE 11/07/2012		
FMS CON. #103162-301000		
REVISIONS		
DATE	SHEET NO.	BY
12/06/12	6&7	MNN

BRADLEY HOWARD FLETCHER LICENSED PROFESSIONAL ENGINEER 14218 STATE OF MISSISSIPPI

DATE: 11/7/12

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

SR 178

PROJ.NO: BR-2910-00(002)

COUNTY: MARSHALL

FILENAME: INDEX.DGN

DESIGN TEAM STANTEC CHECKED DATE

WORKING NUMBER DI-1

SHEET NUMBER 2

REVISION | BY | DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

12/6/2012 1:5:20:31 INDEX.DGN

STATE	PROJECT NO.
MISS.	BR-2910-00(002)

GENERAL NOTES

1. SEE SH. WK. NO. 3 FOR A LIST OF PUBLIC UTILITIES.

2. THE LOCATION AND SPACING OF SIGNS SHOWN ON THE TRAFFIC CONTROL PLANS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT THE FIELD CONDITIONS.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHOULD BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

4. MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ENGLISH 2004 EDITION, PUBLISHED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION SHALL GOVERN THIS PROJECT UNLESS OTHERWISE NOTED BY SPECIAL PROVISIONS, NOTICE TO BIDDERS, OR PLAN NOTES.

5. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC. SHALL BE BACK FILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CAN NOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.

7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF EXISTING GRADES AND MAKING ADJUSTMENTS AS NECESSARY WITH THE APPROVAL OF THE PROJECT ENGINEER.

8. THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM REQUIREMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U.S. DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.

9. ALL SIGNS, PAVEMENT MARKINGS AND TEMPORARY TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALL ITEMS CONTAINED IN THIS PLAN SET THAT ARE NOT EXPLICITLY COVERED BY A PAY ITEM NUMBER ARE COST ABSORBED.

GENERAL NOTES (CONT.)

10. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES, THEREFORE THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE WHAT BRACING, SHORING, OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION. THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR THE DESIGNING, DRAWING, AND CONSTRUCTING THE FACILITY SHALL BE INCLUDE IN THE PRICE BID FOR THE CONTRACT ITEMS.

11. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

12. ROADWAY SIGNS THAT ARE IN CONFLICT WITH CONSTRUCTION OF THIS PROJECT SHALL BE REMOVED AND RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, THE COST OF WHICH IS TO BE ABSORBED ON OTHER ITEMS BID.

13. 25% SHRINKAGE FACTOR USED IN THE EARTHWORK CALCULATIONS IS FOR DESIGN ESTIMATING PURPOSES ONLY.

14. CONTRACTOR IS TO COORDINATE WITH MDOT MAINTENANCE FORCES PRIOR TO THE REPLACEMENT OF THE EXISTING TRAFFIC CONTROL DEVICES. MDOT FORCES WILL REMOVE ALL EXISTING TRAFFIC CONTROL DEVICES.

15. THE CLEARING LIMITS ADJACENT TO THE STREAMS AT STATIONS 92+51.33 (TIPPAH RIVER) AND 162+16.74 (CHEWALLA CREEK) WILL BE LIMITED TO NO FURTHER THAN TEN (10) FEET OUTSIDE THE CONSTRUCTION LIMITS WHEN ANY CLOSER TO THE STREAM THAN FIFTY (50) FEET FROM THE TOP OF THE BANKS

16. WIRE FENCE WILL BE REQUIRED FOR ALL SILT FENCES. (SEE WK. NO. TEC-1)

17. SEE WORKING SHEET TEC-2 FOR SILT BASIN TYPE A

18. IF COLORS ARE USED ON PLAN / PROFILE SHEETS, THEY ARE INTENDED TO VISUALLY EASE THE LOCATION OF ELEMENTS FOR USERS OF THESE DRAWINGS. ALTHOUGH THE INTENT IS TO CATEGORIZE EVERYTHING AS EITHER EXISTING OR PROPOSED, IT IS THE END USER'S RESPONSIBILITY TO ENSURE ALL ELEMENTS ARE TO INTERPRETED CORRECTLY REGARDLESS OF COLOR.

19. GROOVING AND SEALING SHALL BE DONE TO ALL BRIDGE DECKS PRIOR TO OPENING

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

ROADWAY

SR 178

PROJ NO: BR-2910-00(002)
COUNTY: MARSHALL

FILENAME: GENOTES.DGN
DESIGN TEAM STANTEC CHECKED DATE

WORKING NUMBER GN-1

SHEET NUMBER 3

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

11/6/2012 13:42:27 GENOTES.DGN